



The mission of the State Fire Marshal Division is to protect lives and property by fostering a fire-safe environment through investigation, enforcement, regulation, data collection and public education.

State Fire Marshal Division



Minnesota State Fire Marshal Division

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MSFC Sec. 310.7



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Family Child Care Home Safety

Instructor

- Ryan Whiting, Deputy State Fire Marshal
 - Ryan.Whiting@state.mn.us

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Disclaimer

Certain entities, equipment, products, or materials are identified in this presentation in order to describe a procedure or concept adequately or to trace the history of the procedures and practices used.

Such identification is not intended to imply recommendation, endorsement, or implication of entities, products, materials, or equipment.

Such references are used solely for illustrative purposes.

Cell Phones

- <https://www.youtube.com/watch?v=AmAglexEHhc>

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Ground Rules?

- Exits
- Restrooms
- Climate
- Turn pagers, cell phones to vibrate
- Handouts
- Break
- Questions

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Seminar Agenda

- Introductions
- Statistics on fire losses in residential occupancies
- Fire safety requirements
- Question/answers. Last chance!

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Deputy State Fire Marshals

Glen Bergstrand 218-721-4447 (Supervisor)

Danay Freeman 651-201-7200(Support Staff)

- Richard Sorenson 651-769-7785(West Central)
- Ryan Whiting 218-444-4757 (North West)
- Dan Beeson 218-829-9055 (North East)

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Deputy State Fire Marshals

- Robert Rexeisen 612-386-4657 (Central)
- Chris Watson 763-754-0343 (Metro)
- George Shellum 320-327-8465 (South West)
- Floyd Cupkie (retired) 507-444-2426 (South East)

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Deputy State Fire Marshals

- Phone numbers for all Deputy State Fire Marshals are posted by county on the division website under the “About” tab
- Some regions have changed – check the website
- Lots of useful information on the SFMD website

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SFMD Home Page

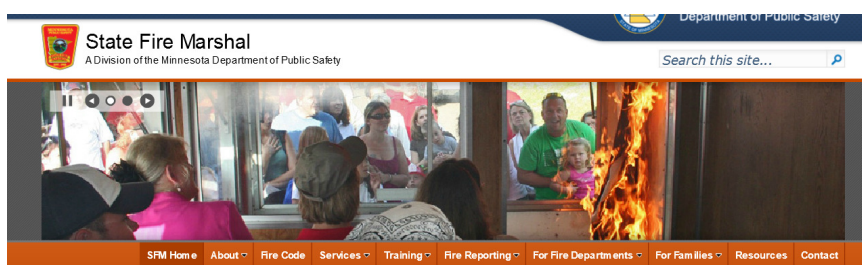


Find contact information here

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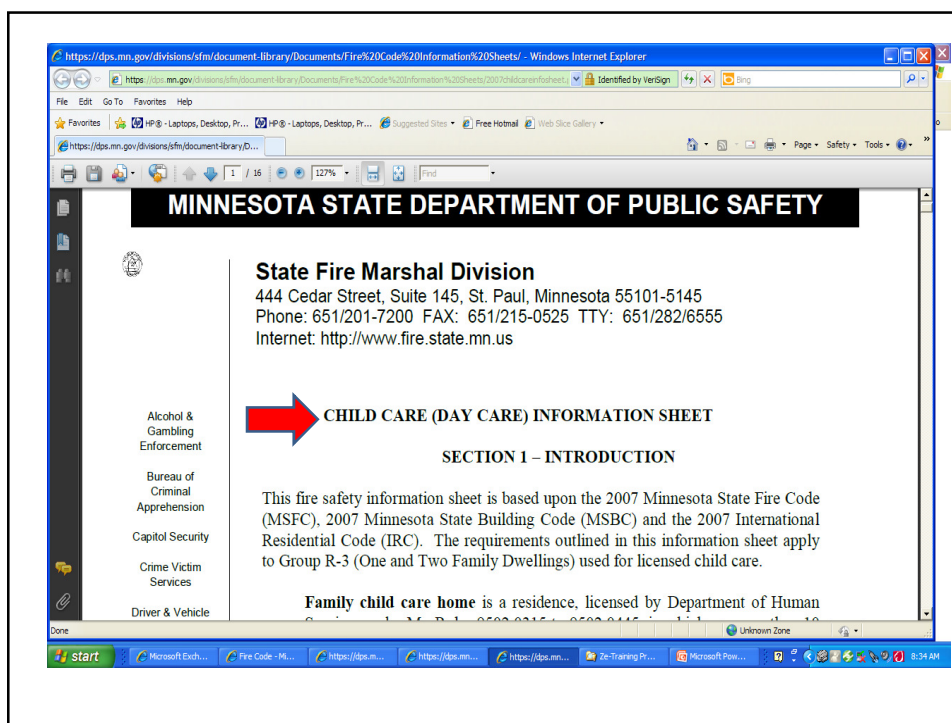
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www.fire.state.mn.us



Find Information Sheets Here

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2015 Fire Safety

- Most fires in Minnesota happen in the home – 77% or 5,039 fires. (2015)
- Fire dollar loss in Minnesota (2015)
 - » \$612,586 Per Day
 - » \$25,524 Per Hour
 - » \$425 Per Minute
- 32% of injuries are suffered trying to control fire
- Smoke Alarms 80% Effective

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Leading Causes

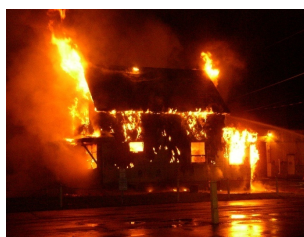
- Cooking – 44%
(5 deaths/33 injuries)
- Heating – 6%
- Electrical – 8%
- Open Flame – 7%
- Appliances – 8%
- Incendiary -5%
- Smoking – 3%
- Natural – 3%
- Other – 16%



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Fire Deaths – 57 in 2015

- 74% are in residential homes (42 residential fire deaths in 2015)
- Careless smoking was involved in 19%
- Candles
- Combustibles too close heat sources
- Child play – 386 youth-set Fires



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Residential and Outpatient Care

- **This training covers basic fire code requirements for licensed residential and outpatient care facilities**
 1. Adult Day Services
 2. Child or Adult Foster Care
 3. Family Child Care
 4. Chemical Dependency
 5. Community Residential Settings

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Fire Safety Requirements

- 2015 Minnesota State Fire Code was adopted on May 2, 2016
 - Buildings constructed on or after this date must meet all requirements of the current code.
Considered **NEW** buildings
 - Buildings constructed prior to this date must meet requirements for “existing building”

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Licensed Single Family Homes

- Minnesota State Fire Code Section 102.5
 - Fire Code does not require any features that exceed the International Residential Code

examples: self-closing garage/house door
handrail when more than one rise

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Exits

- Every room shall have access to at least one exit
- Every room used for sleeping by anyone receiving licensed care and basements used for child care shall have at least one **“emergency escape”** that is separate from the main exit from the space
 - Usually an escape window

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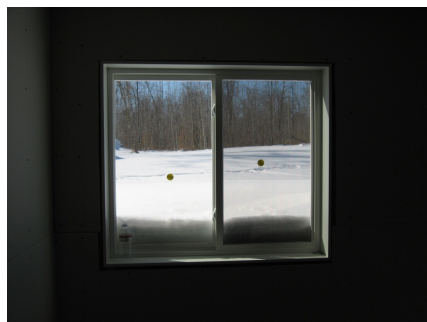
Emergency Escapes

- Escape Window
- Automatic sprinkler system
- Room has a door leading directly to exterior
- Second separate means of escape

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Egress Windows



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Egress Windows?



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Escape Windows Openings

- Installed prior to May 2, 2016 (State Fire Marshal Policy INS-04)

Must meet all 4

- Minimum of 20" width
- Minimum of 20" height
- Minimum of 648 square inches (4.5 square feet)
- Maximum of 48" from the floor to the sill opening

This is the absolute minimum accepted

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Escape Window Openings

- Installed on or after May 2, 2016 above or below grade levels
 - Minimum of 20" in width
 - Minimum of 24" in height
 - Minimum of 820 square inches (5.7 square feet)
 - Maximum of 44" from the floor to the sill opening

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Escape Window Openings

- Installed on or after May 2, 2016 for "grade level" escape windows

Sill opening is not more than 44" below or above the exterior grade (could be a basement window)

- Minimum of 20" width
- Minimum of 24" height
- Minimum of 720 square inches (5 square ft)
- Maximum of 44" from the floor to the sill opening

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Window Wells

- Must allow escape window to fully open
- Minimum accessible clear opening 9 square feet with min dimension of 36"
- If vertical depth exceeds 44" need a ladder permanently affixed in the well
- Ladder must be accessible with window fully open and not interfere with window operation

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Window Wells

- Must be kept clear of obstructions
 - Leaves
 - Snow
 - Toys
- Wells may have a cover
 - Cannot interfere with the window operation
 - Supported such that it cannot freeze down
 - Readily removable from inside the well area

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Exit Hardware

- Exit doors may be provided with a night latch, dead bolt or security chain
 - Must be openable from the inside without the use of a key or tool
 - Must be mounted at a height not to exceed 48 inches above the finished floor (MSFC 1008.1.9.2)

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Guardrails - NEW

- Guardrails for “new” buildings
 - 36” minimum height along horizontal surfaces
 - 34” minimum height along stairs
 - Balusters must be spaced to prevent the passage of a 4” sphere



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Guardrails - Existing

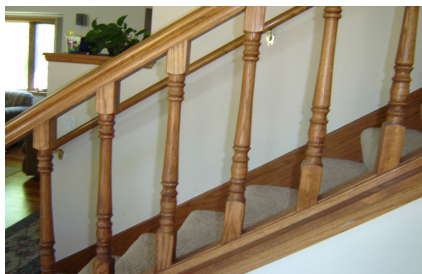
- Guardrails for “existing buildings”
 - 36” minimum height along means of egress
 - 30” minimum height along open sides of stairs
 - Balusters spaced to prevent the passage of a 6” sphere
 - Existing open guards “may” be acceptable if approved by the code official

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Guardrails

- All stairs, floors, decks or walking surfaces located more than 30” above the floor or grade below shall be provided with guards



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Stairways

- “New buildings”
 - 36” minimum clear width
 - 7 $\frac{3}{4}$ ” maximum riser height
 - 10” minimum tread depth



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Stairway

- Is this a new or existing stairway?



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Stairways

- “Existing Buildings”
 - 8 ¼” maximum rise
 - 9” minimum tread depth
 - Other existing stair configurations may be acceptable if approved by the code official

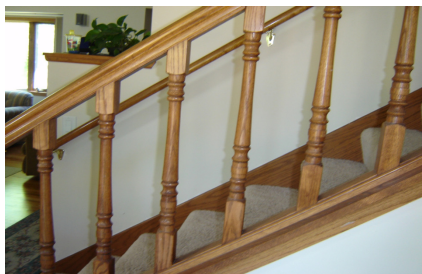


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Handrails

- “New buildings”
 - Along at least one side of all stairs with 4 or more rises
 - Mounted between 34” & 38” measured vertically from the nose of the stair treads



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Handrails

- “New and existing”
 - Continuous from top step to bottom step of any flight
 - No sharp points at the ends
 - 1 ½” minimum between handrail and wall



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Handrails

- “Existing buildings”
 - Along one side of stairs with more than 3 rises
 - Between 30” and 42” uniform mounting height



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Under Stair Protection

- “New buildings”
 - Enclosed usable spaces under stairways must be protected on the enclosed side with ½” minimum thickness gypsum board

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Premises Identification

- Address numbers are required for all buildings
- Plainly visible and legible from the street
- Numbers shall contrast with their background
- Rural areas vary by county: E911 addressing signs, fire number signs, address on mailbox

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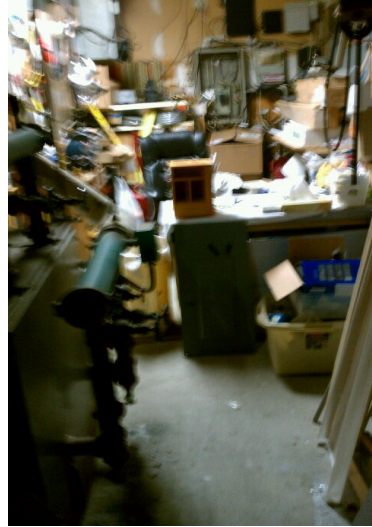


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Combustible Storage

- Storage of combustible materials shall be orderly



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Combustible storage

- Fueled equipment (motorcycles, lawnmowers, chainsaws etc.) shall not be stored, operated or repaired within a dwelling



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B L E V E

(Blast Levels Everything Very Effectively)

- LP (propane) tanks shall not be stored in residential building / garages

- LP - B L E V E

(Blast Levels Everything Very Effectively)



Combustible “Waste” Materials

- Combustible waste materials creating a fire hazard shall not be allowed to accumulate in buildings



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Occupancy Separation

- House/Garage
 - Minimum ½” gypsum board on garage side
 - Extend from floor to underside of roof sheathing or gypsum board ceiling

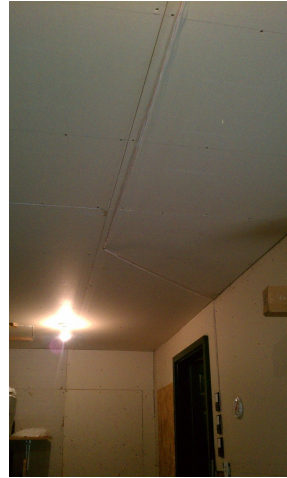


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Occupancy Separation

- Living space above attached garage must be protected with 5/8" minimum thickness gypsum board on the garage ceiling (supporting walls must also have protection)

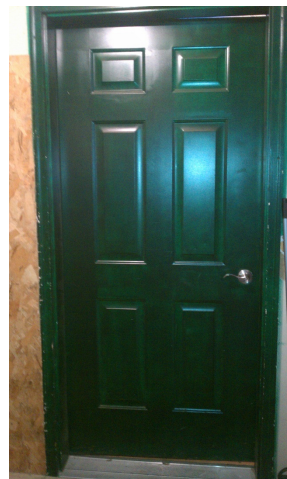


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Separation Opening Protection

- House/garage door must be either:
 - Solid wood 1 3/8" minimum thickness
 - Steel insulated door 1 3/8" minimum thickness
 - Labeled 20 minute minimum fire door



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Penetrations

- No duct openings are allowed to communicate with the garage
- Ducts running through the garage must be 26 gauge minimum sheet steel with no openings
- All other penetrations must be fire stopped

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Sources of Ignition

- No sources of ignition allowed in attached garages with ignition source less than 18" above the garage floor
 - Fuel Fired Heaters
 - Wood stoves



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Fire Resistive Construction

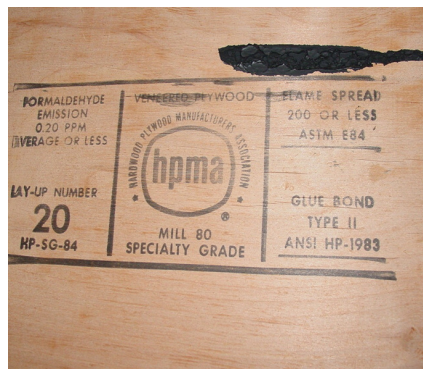
- Any other required fire resistive rated construction must be installed and/or maintained in accordance with the fire code
- This may include other occupancy separations, type of construction, separation distances from other buildings or property lines, etc.

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Interior Finish

- Processed wood paneling must meet Class C flame spread or be at least $\frac{1}{4}$ thick
- Fiber/buffalo board does not meet Class C flame spread
- If question, get documentation



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Interior Finish

- Rim joist area foam insulation can be left uncovered if:
 - Max 5 ½" thick
 - Flame spread ≤ 25
 - Smoke Development ≤ 450



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Interior Finish

- All other foam insulations:
 - Must be covered with a 15 minute thermal barrier - ½" minimum thickness gypsum board
- Exception – certain sheet foam products (must be labeled)

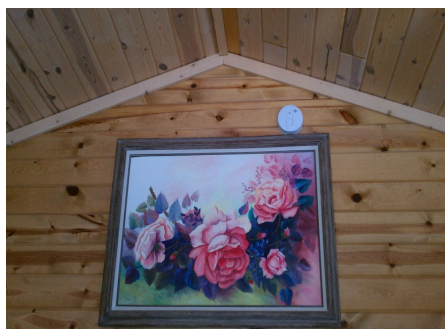


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Smoke Alarms

- Constructed after on or after May 2, 2016
 - Each level
 - Each sleeping room
 - Hard wired
 - Battery backup
 - Interconnected
 - Located per listing
 - Not in kitchens
 - Not where it freezes



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Smoke Alarms

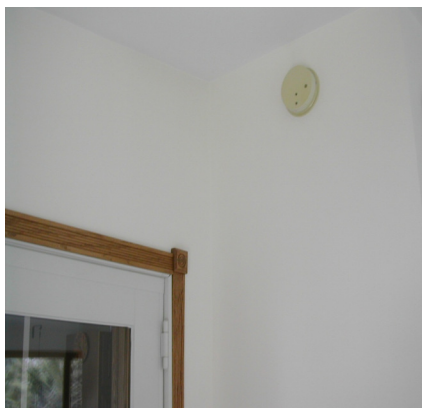
- Constructed after July 9, 2007 same as new
- Constructed prior to July 10, 2007
 - In hallways or areas giving access to each separate sleeping area.
 - On each level of the dwelling including basements
- Constructed after June 29, 1998
 - wired-in with battery back-up and interconnected.

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Smoke Alarms

- Constructed prior to Aug 1, 1989
 - Can receive primary power from battery
- Refer to MSFMD Information Sheet – **Smoke Alarm Requirements For Residential Occupancies**



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Smoke Alarms

- Smoke alarms shall not remain in service longer than 10 years from the date of manufacture
- Interconnected smoke alarms generally must be all the same brand to function correctly

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Smoke Alarms

- Smoke Alarms with 10 year tamper proof battery available
- Wireless interconnection available

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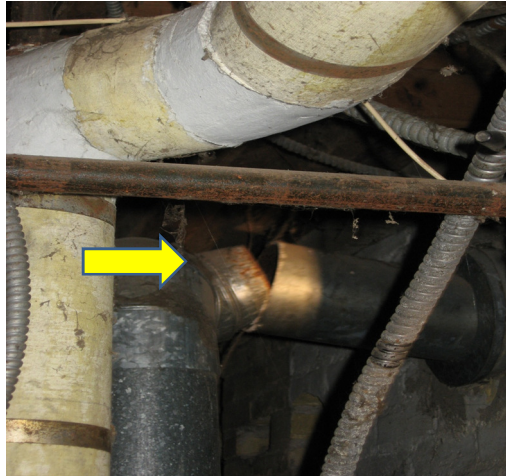
Heating appliances

- Installed per listing and applicable codes
- Maintained in good working condition
- Keep combustibles clear
- Vented outside properly
- Non-vented fuel fired heaters prohibited after Sept 20, 2004



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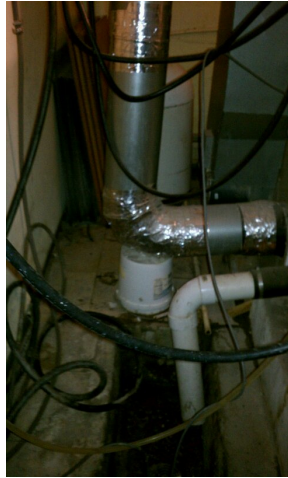
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Heating Appliance Installation



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Heating appliances

- Portable Unvented, fuel-fired heaters not located in
 - Bedrooms
 - Bathrooms
 - Storage rooms



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Heating Appliances

- Non-portable unvented fuel-fired heaters are not allowed



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CSST Gas Line

- <http://www.youtube.com/watch?v=0SvS40oYMiE>
- Corrugated Stainless Steel Tubing
 - If CSST gas pipe is used the gas pipe system has to be bonded to the electrical ground

Domestic Clothes Dryers



- Must be vented in accordance with the manufacturer's instructions
- Plastic vent pipe is not allowed
- Short and straight venting is best, each bend reduces allowable length

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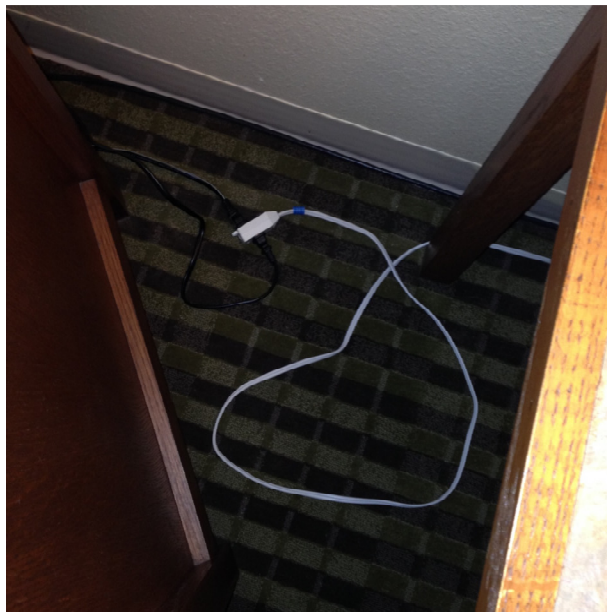
Electrical Services

- No extension cords for permanent wiring
- No multi-plug adapters
- No taped wiring
- No open electrical boxes
- “Power taps” are permitted. (Must have over current protection)



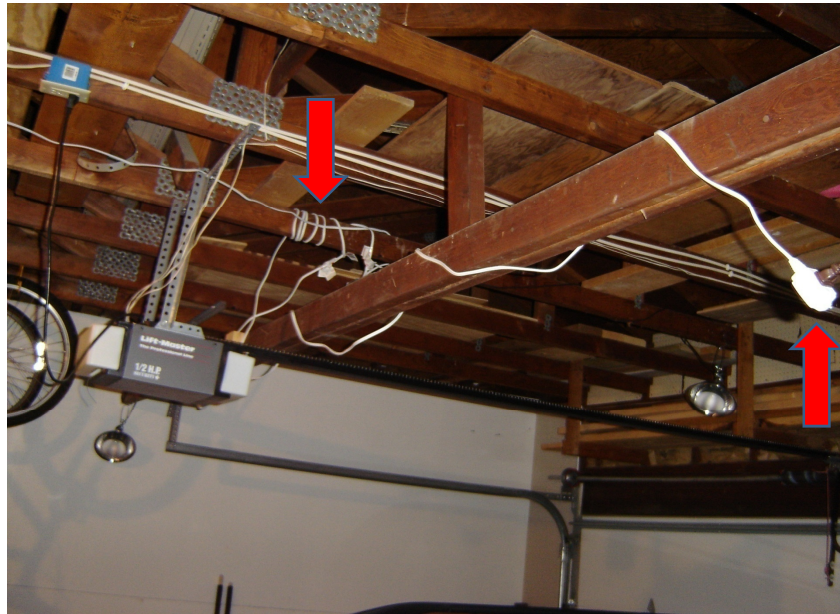
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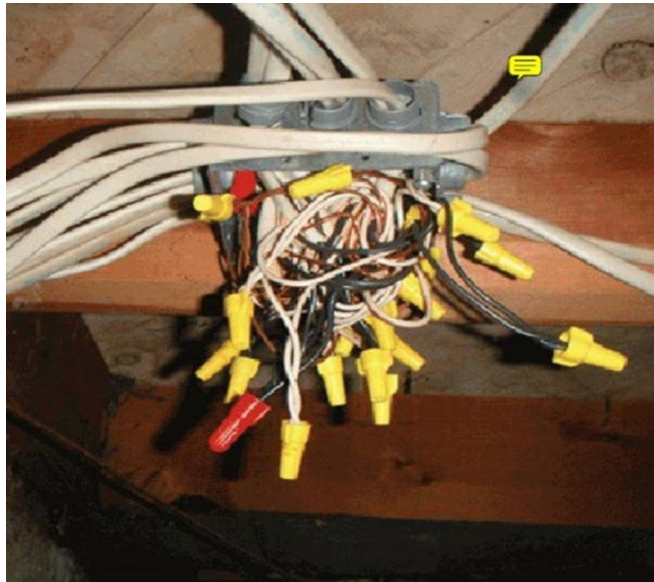
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Electrical Appliances

- Installed per listing and manufacturer's instructions
 - Dryer vents
 - Water heater PRV's



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Fire Extinguishers

- Minimum 2A:10BC rating required
- Evacuate, call 911
- Annual Maintenance



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Manufactured Homes

- 2 exit doors – both with landings, stairs, handrails, guards per the SBC.
 - Easily open-able, not taped shut, covered with blankets etc
 - Smoke Detectors wired in with battery back-up in hallways and bedrooms in new construction and interconnected
 - Existing generally made with hardwired smoke alarms near each separate sleeping area

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Manufactured Homes

- Egress windows
 - Same requirements as site constructed dwellings
 - HUD labeled home with factory egress windows that work

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Carbon Monoxide Detection

- Every single family dwelling and apartment shall have a carbon monoxide detector within 10' of each bedroom.

— **Recommendation**

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Care Facility Classification Table

Chemical dependency treatment programs	Chemical dependency treatment program outpatient (< 24 hrs)	Not regulated	B
	Chemical dependency treatment program-residential	< 5 residents	R-3 Dwelling unit
	Chemical dependency treatment program-residential	6-16 residents	R-4
	Chemical dependency treatment program-residential	> 16 residents	I-1

Group R-4 Occupancies

- Residential occupancy housing 6-16 occupants (excluding staff)
 - Residential chemical dependency treatment
 - Group homes
 - Congregate living facilities

RESIDENTIAL TREATMENT

- Residential Group R-4: 6 – 16 occupants, excluding staff.
 - NFPA 13 or 13R sprinkler system required.
- Fire Alarm Requirements – 907.2.10
 - Exception: two stories or less, 1 hour rated sleeping room separation & each sleeping room has an exit to a public way
- Sleeping room smoke alarms are required in accordance with 907.2.11.1

RESIDENTIAL TREATMENT

- Institutional Group I-1
 - More than 16 persons
 - 24 hours basis

RESIDENTIAL TREATMENT

- Group I-1 (cont.)
 - NFPA 13 or 13R sprinkler system is required
 - Fire Alarm required - 907.2.6.1
 - Central Station Monitoring – 907.2.6.2
 - Sleeping room smoke alarms are required in accordance with 907.2.11.1
- Locking arrangements????????????

RESIDENTIAL TREATMENT

- **1008.1.9.6 Special locking arrangements in Group I-1, I-2, R-3, or R-4 occupancies.** Approved special locking arrangements shall be permitted in a Group I-1, I-2, R-3, or R-4 occupancy where the clinical needs of the persons receiving care require such locking. Special locking arrangements shall be permitted in such occupancies where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1 and either an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that doors are installed and operate in accordance with Items 1 through 10. Items 1 through 4 shall not apply to doors to areas where persons, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
 - Go to the code for the items 1 – 10 requirements

Group B Occupancies

- Day Treatment
 - Less Than 24 hours
 - Outpatient treatment

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General Requirements (non single family)

- Exits
- Exit Hardware
- Exit Signs
- Emergency Lighting
- Fire Extinguishers
- Separation

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Adult Day Care Classifications

- **Group E Occupancy**

- Centers serving only participants who are capable of taking appropriate action for self-preservation under emergency conditions

- **Group I-4 Occupancy**

- Centers serving only participants who are not capable of taking appropriate action for self-preservation under emergency conditions

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Classification: Capable vs. Not Capable

- **Minn. Rules 9555.9600 to 9555.9730:**

- **Capable of Self Preservation when:**

- Ambulatory or mobile; and
- Combined physical/mental capability to:
 - ✓ recognize a danger, signal, or alarm
 - ✓ evacuate with only minor assistance
 - ✓ select an alternative means of escape
 - ✓ remain at designated meeting location

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Capable vs. Not Capable

- **MSFC Chapter 2 definition:**
- **Incapable of Self Preservation:**
 - Persons because of age, physical limitations, mental limitations, chemical dependency, or medical treatment who cannot respond as an individual to an emergency situation

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Occupancy Classification of ADCC's

- **ADC Mixed-Capability Population**
 - Can be classified as either
 - Group E
 - Group I-4

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Classification of ADCC's

• **ADC centers with mixed-capability population: Group E when:**

1. Not more than 50% of population is incapable of self-preservation
2. All exits are direct to grade without intervening stairs
3. The center is protected with an automatic fire alarm system
4. Evacuation time of 3 minutes or less or less

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Classification of ADCC's

- **ADC centers with mixed-capability population and do not meet all requirements of MSFC 8102.1.3**
 - 1) max 50% incapable of self preservation
 - 2) grade level exiting
 - 3) complete fire alarm system
 - 4) evacuation time of 3 minutes or less
 - **...will be classified as Group I-4**

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Classification of ADCC's

- Q: What if the ADC isn't operating yet, and they don't know how many clients will be incapable of self preservation: How would I classify it?
- A: *Discuss the various classification requirements with the ADC representative, and then choose a classification for the basis of the inspection. Make sure to record the occupancy classification within the inspection remarks.*

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ADC Centers - Mixed Population Group E Fire Alarm System Requirements

- **Detection in Hazardous Areas**
 - Automatic fire detection (heat or smoke) required in boiler and furnace rooms, kitchens, storage rooms, janitors closets, laundries, and other hazardous areas
- [MSFC 8102.1.3.3]

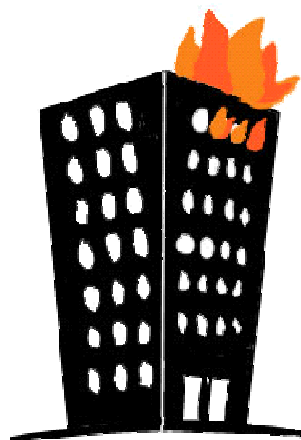


ADC Centers - Mixed Population Group E Fire Alarm System Requirements

- **Smoke detection required throughout the exiting system (MSFC 8102.1.3.3)**



ADC Centers - Mixed Population Group E Evacuation Requirements



- The ADC center must demonstrate the ability to evacuate the entire population within 3 minutes.

MSFC 8102.1.3.4

ADC Centers - Mixed Population Group E Evacuation Requirements

- Q: How am I supposed to know whether or not the population can be evacuated within 3 minutes?
- A: *You're not! The number and capabilities of the ADC are subject to frequent change. Evacuation times are to be verified by DHS.*



Occupancy Classification Question?

Existing Group E Adult Day Care Center

- 20 clients total (8 incapable of self-preservation)
- Complete fire alarm system with smoke detection
- Evacuation time of less than 3-minutes
- Main level use only
- Basement (currently unoccupied) has 2 separate exit stairways leading to separate main level exit discharge doors

QUESTION: *The ADC wants to increase license capacity to 30 and occupy the basement level. Would this change the occupancy classification?*

Occupancy Classification Question?

➤ **ANSWER: YES**

- Mixed-capability population
- No grade-level exits in basement per 8102 (occupants must egress via stairs)
- I-4 classification is the only possibility

Fire Safety & Evacuation Plans

• **Day Care Centers must;**

- ✓ Maintain emergency evacuation plans
- ✓ Maintain fire safety plans
- ✓ Conduct monthly emergency evacuation drills
- ✓ Provide employees with annual fire safety training



MSFC 404; 405; 406

Child Care Centers

- I-4 Child Care Centers
 - Sprinkler system is required for all
 - Fire alarm system
- E Child Care Centers
 - Exit at grade from every room used by children 30 months of age or less
 - Fire alarm system when exceeds 50 occupants
 - Limited to 100 children

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Special Exiting Provision For Young Children in School Buildings

- **Child day care, preschool, head-start** and similar programs in school buildings shall be located on the floor level of exit discharge (LED)
 - Exceptions given for buildings with fire sprinkler systems and/or fire alarm systems or other egress methods
 - 2nd grade students may also be located one story above LED
 - An Information Sheet is available for download at the SFMD Website.

MSFC 1001.3; MSBC 421

Special Exiting Provisions: Matrix from SFMD Info Sheet

CONDITION	PRE	K	1	2	3	4	5	6
Classrooms								
Level of exit discharge (LED)								
- no fire protection	ok	ok	ok	ok	ok	ok	ok	ok
1 story above LED (2nd story)								
- no fire protection	np	np	np	ok	ok	ok	ok	ok
1 story above LED (2nd story)								
- auto fire alarm & exclusive exits	ok	ok	ok	ok	ok	ok	ok	ok
1 story above LED (2nd story)								
- auto sprinkler & exclusive exits	ok	ok	ok	ok	ok	ok	ok	ok
1 story above LED (2nd story)								
- auto sprinkler & auto fire alarm	ok	ok	ok	ok	ok	ok	ok	ok
2 stories above LED (3rd story)								
- no fire protection	np	np	np	np	ok	ok	ok	ok
2 stories above LED (3rd story)								
- auto sprinklers or auto fire alarm								
-AND- exclusive exits	ok	ok	ok	ok	ok	ok	ok	ok
2 stories above LED (3rd story)								
- auto sprinklers & auto fire alarm	ok	ok	ok	ok	ok	ok	ok	ok
1 story below LED (basement)								
- exits direct to grade level	ok	ok	ok	ok	ok	ok	ok	ok
1 story below LED (basement)								
- auto sprinklers & auto fire alarm	ok	ok	ok	ok	ok	ok	ok	ok
1 story below LED (basement)								
- auto sprinklers or auto fire alarm								
-AND- exclusive exits	ok	ok	ok	ok	ok	ok	ok	ok

Special Exiting Provision For Young Children in School Buildings

•Child care areas in school buildings may be located on any floor level below the 4th story if;

- ✓ Fire sprinkler system throughout, and
- ✓ Fire alarm system with smoke detection
 - throughout the exiting system
 - within all areas except classrooms and offices

-
-

Special Exiting Provision For Young
Children in School Buildings

•Child care areas in fully sprinkled school buildings may be located on any floor level when;

- The use area is limited to one grade level at a time, and
- Independent exiting is provided from the exiting systems used by older students
 - *For the purposes of this section, pupils from the 2nd grade and below are considered one grade level*

•

Special Exiting Provision For Young
Children in School Buildings

•Child care areas in school buildings equipped with only a fire alarm system may be located on any floor level when;

- Smoke detection throughout exiting system and within all areas other than classrooms and offices, and
- The use area is limited to one grade level at a time, and
- Independent exiting is provided from the exiting systems used by older students

•

Special Exiting Provision For Young Children in School Buildings

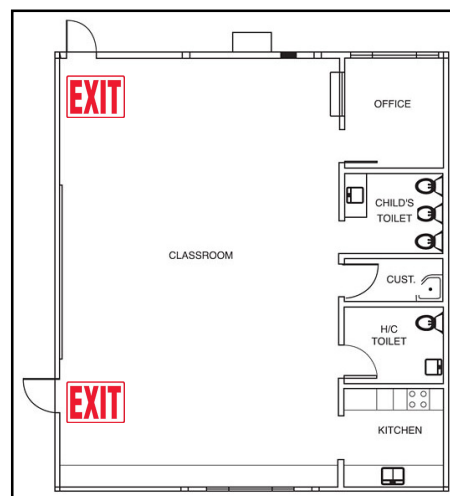
•Accessory spaces in school buildings used for child care

- Gyms, cafeterias, libraries, etc.
- ...may be used when located one level above or below the LED if;
 - ✓ fire sprinkler system throughout, or
 - ✓ fire alarm system with smoke detection throughout the exiting system
-
-

Day Care Centers: Number of Exits (New)

•Two exits required for day care areas w/occupant load >10

- Day Care occupant load factor = 35 sq.ft.
- Thus, any room or area over 350 sq.ft. require at least 2 exits



Spaces with One Means of Egress (New)

**TABLE 1015.1
SPACES WITH ONE MEANS OF EGRESS**

OCCUPANCY	MAXIMUM OCCUPANT LOAD
A, B, E ^a , F, M, U	49
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, I-4, R	10
S	29

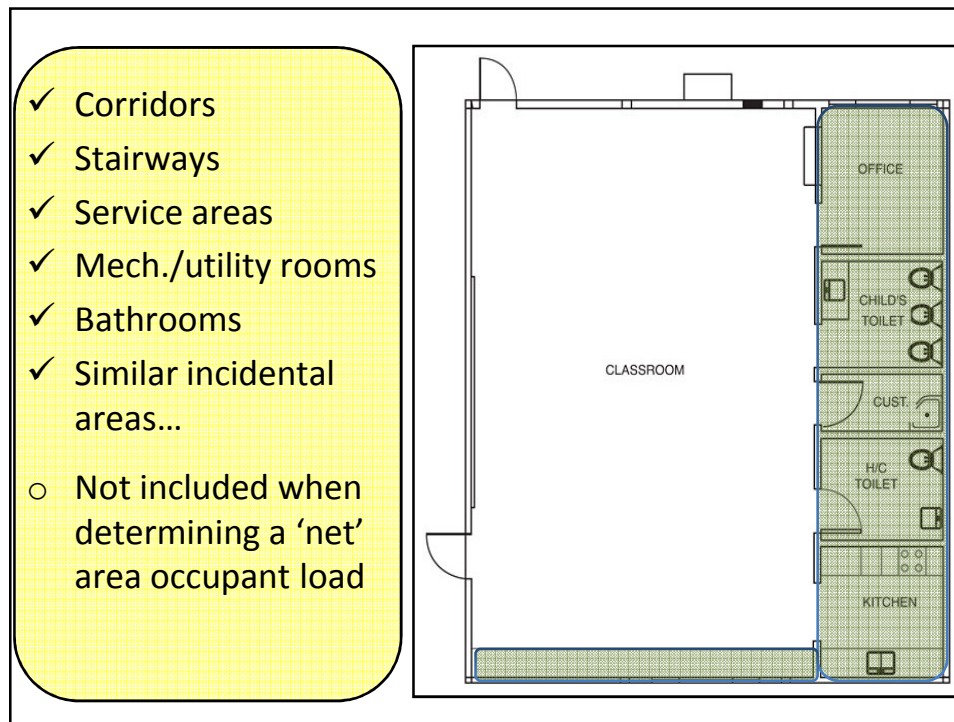
a. Day care maximum occupant load is 10.

Group E Day Care Center Exiting (New)

**TABLE 1004.1.2
MAXIMUM FLOOR AREA
ALLOWABLE PER OCCUPANT**

OCCUPANCY	FLOOR AREA IN SQ. FT. PER OCCUPANT
Day care	35 net

(Portions of table not shown do not change)



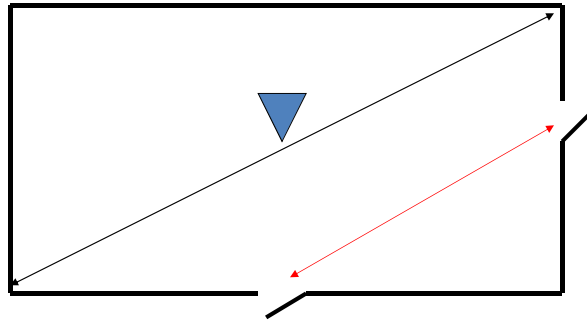
2015 MSFC Change in No. of Exits

➤ **2015 MSFC egress summary**

- 2 or more exits required with any of the following conditions
 - ✓ Care rooms/areas serving more than 10 children, 2.5 years of age or less
 - ✓ Group I-4, more than 10
 - ✓ *Group E care rooms/areas serving 50 or more children*
 - *Change from 2007 MSFC*

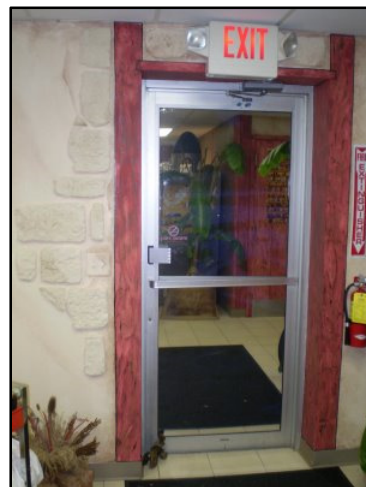
Minimum Separation of Exits (New & Existing)

- **Non-sprinkled Building:** 1/2 of the longest diagonal of the room or area
- **Sprinkled Building:** 1/3 of the longest diagonal of the room or area [MSFC 1015.2.1]



Egress Doors

- **Must be side-hinged**
some exceptions
 - i.e. power-operated doors, Group R-3, etc.
- **Must swing in the direction of egress when serving an occupant load of 50 or more**
- MSFC 1008.1.2; 1104.7



Egress Doors

Minimum clear width

- New: 32"
- Existing: 28"
- No less than required per MSFC 1005.1

Minimum height: 80"

MSFC 1008.1.1; 1104.7.1



Egress Door Hardware (New & Existing)

- Egress doors must open without
 - ✓ Keys
 - ✓ Special knowledge or effort
- Door must release with a single operation

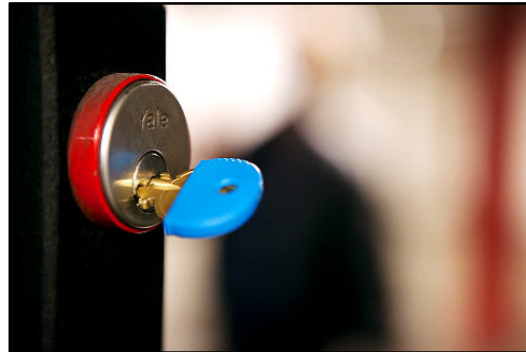


MSFC 1008.1.8; 1104.7

Egress Door Hardware
(New & Existing)

- **Double-keyed lock on main exit door not permitted in E or I-4 occupancies**

(MSFC 1008.1.8.3)



Egress Door Hardware
(New & Existing)

- **Day care centers are not permitted to lock exit doors!**



MSFC 1008.1.8, 1104.7



Unapproved Locking Device



Egress Door Hardware (New & Existing)

Delayed egress locks

- ✓ Requires sprinkler system or fire alarm smoke detection system
- ✓ Locks release with activation of fire protection systems or loss of power
- ✓ Irreversible unlocking process after 1 second
- ✓ 15 or 30 second delay
- ✓ Not permitted in Group A occupancies



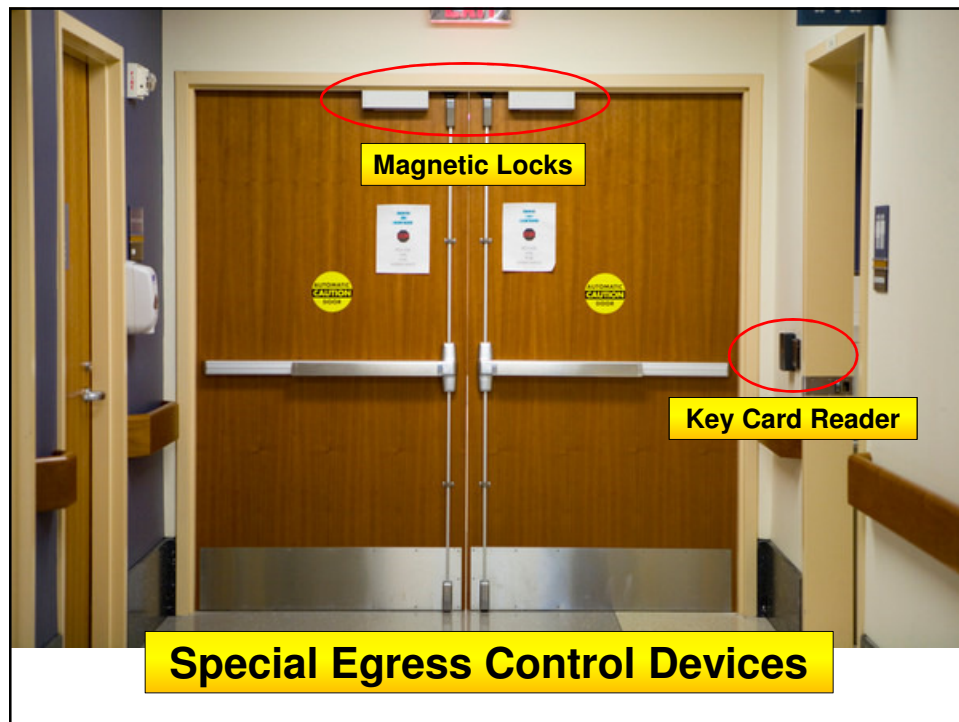
MSFC 1008.1.8.6

Egress Door Hardware (New & Existing)

Special Egress Control Devices

Where clients require special security for safety (MSFC 1008.1.9.6) Group I-1, I-2, R-3, R-4

- ✓ Fire sprinkler system
- ✓ Fire alarm system with smoke detection
- ✓ Locks release with activation of fire protection systems or loss of power
- ✓ Only one control device per egress path
- ✓ Constant staff supervision with keys
- ✓ Etc.



Egress Door Hardware Height

- **Door hardware height**

- (MSFC 1008.1.9.2)

- between 34" and 48" above floor level



Egress Door Hardware Height

- **Door hardware height**

- (MSFC 1008.1.9.2)

- Hardware height cannot exceed 48" in an attempt to prevent children from operating exit doors



Panic Hardware (New & Existing)

- **Panic hardware**

Required in Group E when occupant load >49

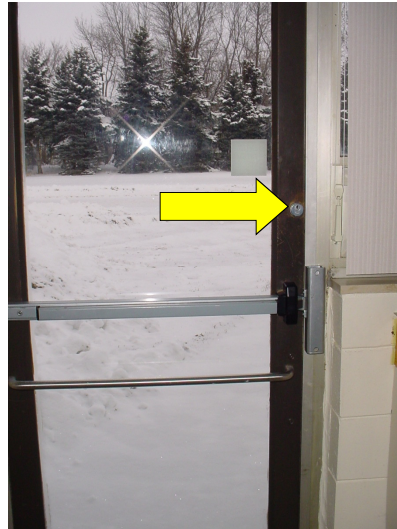
- Panic hardware is not required in Group I-4 (only Groups A, E and H)

MSFC 1008.1.10; 1104.7



Panic Hardware (New & Existing)

- **Panic hardware**
- No additional locking/latching devices allowed on doors with panic hardware



Panic Hardware (New & Existing)



Required Systems Maintenance

- Fire Alarm System – annual test and inspection
- Sprinkler System – annual test and inspection
- Fire Extinguisher – annual testing with documentation tag affixed
- Single Station Smoke Alarms – replace when exceed 10 years old
- Exits and Hardware – continuous

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Recommended System Maintenance

- Single Station Smoke Alarm Test – monthly
- Single Station Smoke Alarm Battery Replacement – 6 months
- Emergency Lighting Test – monthly
- Exit Sign Test - monthly
- Fire Extinguisher facility check – monthly

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Facilities licensed by MDH

- MDH has too many types of license and registration combinations to outline in groups, each case has to be evaluated individually however the basic fire code requirements will be very similar to most occupancies.

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Certified Design Plans Required

• **State Statute 326.02 - 326.15 and MN Rules 1800.5200 will in most cases require that certified plans be prepared by a licensed architect or engineer for;**

1. New construction
2. Change in occupancy use classification of an existing building
3. Change in exiting of an existing building

MN Board of Architecture: <http://www.aelslagid.state.mn.us/>

Class Certificate

- In order to obtain a certificate of attendance for this training you will need to log in to the SFMD training registration site and complete a short survey
- You will need to wait a couple days for staff to get the survey online
- Once the survey is submitted you will be able to print the certificate

5/07

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Questions

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- Answers

» Answers?

Email Code Questions to:
firecode@state.mn.us

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